

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Nobumasa SUZUKI et al. Group Art Unit : 3733  
Appl. No. : 10/659,302 Examiner : R. Shaffer  
Filed : September 11, 2003 Confirmation No. : 3567  
For : ROD FIXING APPARATUS FOR VERTEBRA CONNECTING MEMBER

**REPLY BRIEF UNDER 37 C.F.R. § 41.41**

Commissioner for Patents  
U.S. Patent and Trademark Office  
Customer Service Window, Mail Stop Appeal Brief-Patents  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Sir :

In response to the Examiner's Answer, dated March 9, 2007, to the Appeal Brief filed January 25, 2007, Appellants submit the present Reply Brief.

Appellants maintain that each reason set forth in the Appeal Brief filed January 25, 2007 for the patentability of the pending claims is correct and again respectfully request that the decision of the Examiner to finally reject claims 1-3 be reversed and that the application be returned to the Examining Group for allowance.

REMARKS

The “Grounds of Rejection” beginning on page 3 of the Examiner’s Answer relies on the same references previously applied to reject the claims. In this regard, it is noted that while the Examiner has referred for the first time in the Examiner’s Answer to Dictionary.com for definitions of “extend”, Dictionary.com is not considered a reference relied on to reject the claims under 35 U.S.C. § 102 in this case. It is respectfully submitted that the Appeal Brief filed January 25, 2007 has fully addressed the previous arguments made by the Examiner with respect to the applied references. Accordingly, Appellants limit the substantive remarks of the present Reply Brief to an overview of the relevant features of the pending claims addressed in the Examiner’s Answer and to addressing the “Response to Arguments” section of the Examiner’s Answer.

In this regard, Appellants submit that the prior art fails to disclose a rod fixing apparatus including a pressure fixing device and “protruding portions configured to eat into the rod portion in both end sides of the circular arc rod engagement portion outside the pressure fixing device, the protruding portions extending in a direction substantially perpendicular to a longitudinal direction of the vertebra connecting member”, as recited in independent claim 1.

In the Examiner’s Answer, the Examiner has stated that the projections 17 extend “along the groove as well as perpendicular to the longitudinal axis of the groove” and that “[e]ach projection 17 has a width” and “a group of projections 17 can be interpreted as a ‘protruding portion, which extend perpendicular to the longitudinal axis of the groove’”. However, it is respectfully submitted that the ridges 17 of JACKSON do not extend in a

direction substantially perpendicular to the longitudinal direction of the vertebra connecting member.

In particular, as clearly shown in figures 1 and 2 of the JACKSON patent, each ridge 17 extends in a direction *parallel* to the longitudinal direction of the spinal rod 15. Each ridge 17 has a longitudinal direction of extension. However, contrary to the Examiner's position, the rods do not extend in a direction perpendicular to the rod as well in the direction parallel to the rod. Contrary to the Examiner's statements, such a position is not a reasonable reading of the claims in this case.

In this regard, the ridges 17 in JACKSON are arranged side by side in a row, the row extending along the lower curved edge of the channel. However, the claim recites protruding portions "extending in a direction substantially perpendicular to a longitudinal direction of the vertebra connecting member". The claim does *not* recite a *group* of protruding portions extending perpendicular to the longitudinal direction. Moreover, even assuming, arguendo, that the row may be described as extending in a direction substantially perpendicular to the longitudinal direction of the rod, each ridge 17 itself does not extend perpendicular to the longitudinal direction of the rod. In this regard, Appellants respectfully submit that the Examiner's position that the ridges extend both in the parallel direction and the perpendicular direction is an unreasonably broad interpretation of the claim language. While it is possible that some articles may extend both in the parallel and perpendicular directions, that is not the case here. In this regard, Appellants point out that the elements of JACKSON are *ridges*, which can extend in one direction *only*. Otherwise, the resulting element could not fairly be described as a ridge. Accordingly, the ridges 17 of JACKSON cannot fairly be described as extending in a

direction substantially perpendicular to the longitudinal direction of the rod. Moreover, the JACKSON patent specifically discloses in column 4, lines 21-23 of JACKSON that the ridges 17 “*extend* from a first or front face 18 to a second or rear face 19 of the bone screw head 7” (emphasis added). Therefore, JACKSON fails to disclose “protruding portions extending in a direction substantially perpendicular to a longitudinal direction of the vertebra connecting member”, as recited in claim 1.

Accordingly, Appellants submit that the JACKSON patent lacks any disclosure of a rod fixing apparatus including, *inter alia*, a pressure fixing device and “protruding portions configured to eat into the rod portion in both end sides of the circular arc rod engagement portion outside the pressure fixing device, the protruding portions extending in a direction substantially perpendicular to a longitudinal direction of the vertebra connecting member”, and that therefore JACKSON cannot possibly be viewed as anticipating any of the present claims.

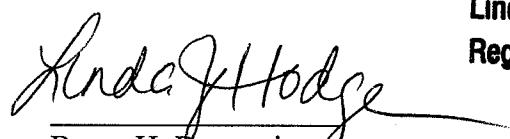
For at least all of the above reasons, Appellants submit that the rejection of claim 1 under 35 U.S.C. § 102(b) is inappropriate and unsupported by the teachings of JACKSON. Therefore, Appellants respectfully request that the decision of the Examiner to finally reject claim 1 under 35 U.S.C. § 102(b) be reversed, and that the application be remanded to the Examiner for withdrawal of the rejection over JACKSON and for an early allowance of claim 1 on appeal.

Accordingly, is it respectfully submitted that the prior art, including JACKSON, fails to disclose the subject matter claims that the rejection of claims 1-3 under 35 U.S.C. § 102(b) is improper for at least the above reasons and withdrawal thereof is respectfully requested.

Therefore, Appellants again submit that the applied art of record fails to disclose the unique combination of features recited in Appellants' claims 1-3 under 35 U.S.C. § 102(b). Accordingly, Appellants respectfully request that the Board reverse the decision of the Examiner to reject claims 1-3 under 35 U.S.C. § 102(b) and remand the application to the Examiner for allowance.

Respectfully Submitted,  
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